

# **The Price of Good Water— Some Thoughts about Water and Sanitation Affordability**

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# Why Concern About Affordability

## ■ The Cost of Infrastructure Replacement

- Multiple studies (EPA Gap Analysis, WIN, OMB, etc.) estimate from 150-500 Billion in investments needed through 2020.
- All scenarios view some increase in rates as part of financing this investment.

## ■ The Cost of New Water Treatment

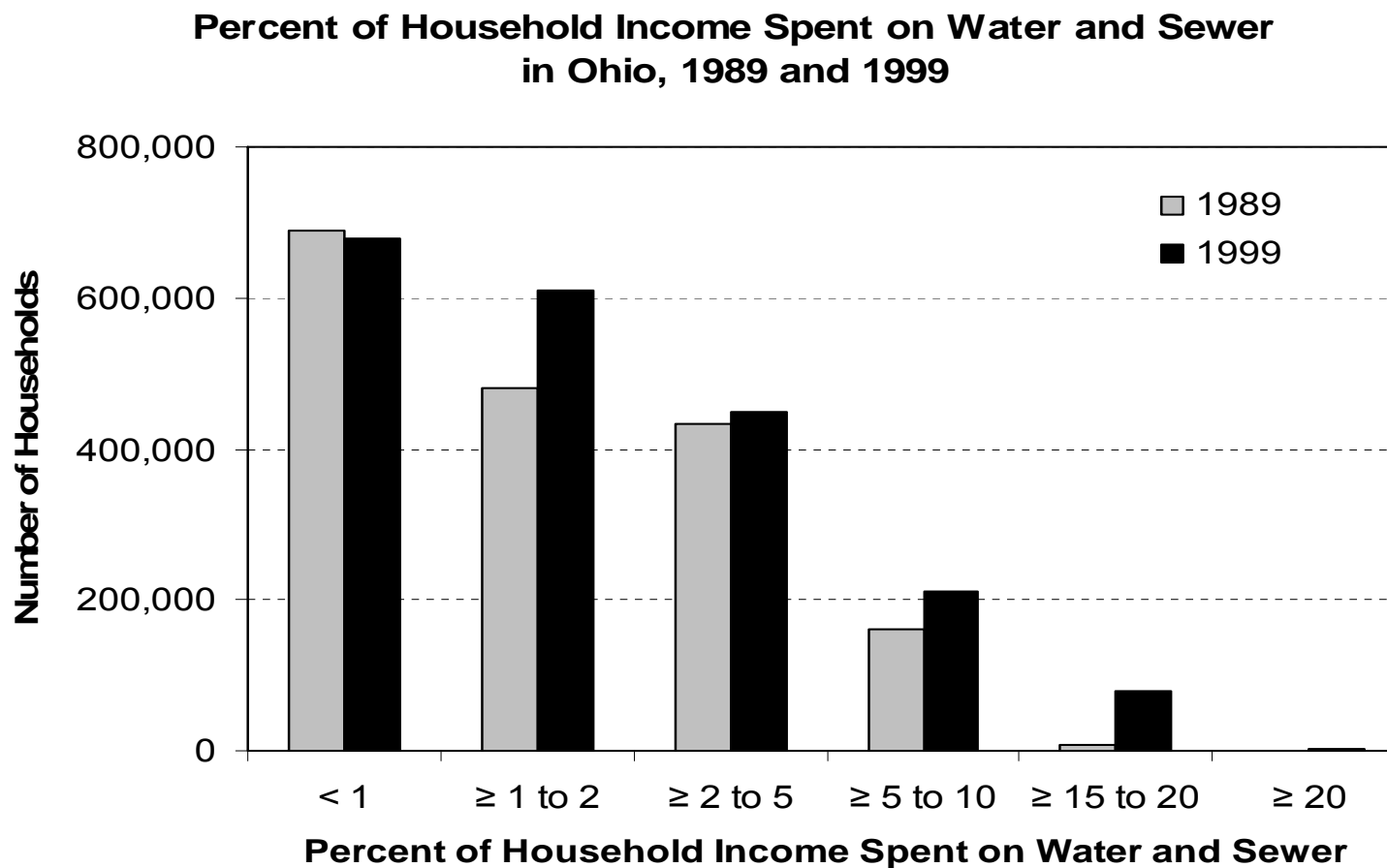
- Arsenic, Total Coliform, DPB Stage 2, LT2, GWR
- All of these will involve costs to water systems—and could imply significant rate increases—some scenarios as much as doubling average rates.

## ■ New Government Resources are Unlikely

# How Expensive is Water in the US?

- Average expenditures for water and sewer are less expensive per capita, per month and by quantity than in any industrialized nation.
- CBO estimates that water and sewer bills average between 0.5 and 1 percent of household income.
- Data from the 2000 census show that the annual cost in 1999 averaged \$476 per year for w/ww.
- Just less than half (11.4 million) of households with incomes under \$20,000 per year paid a water or wastewater bill in 1999.

# Who is being impacted?



# Rural-Urban Divide

<i>Type of County</i>	<i>% of MHI paid for water and sewer facilities (All HH)</i>	<i>% of MHI paid for water and sewer facilities (rural HH)</i>
County in metro area with 1 million population or more	0.76	0.68
County in metro area of 250,000 to 1 million population	0.81	0.73
County in metro area of fewer than 250,000 population	0.88	0.79
Nonmetro county with urban population of 20,000 or more	0.91	0.82
Nonmetro county with urban population of 2,500-19,999	1.01	0.94
Nonmetro county completely rural or less than 2,500 urban population	1.03	1.03
Difference between lowest and highest percentages	35.5%	51.5%

# Issues in Rural Communities

- Both the actual cost and cost of water to customers varies significantly in rural communities based socio/political factors and:
  - the quality of source water;
  - treatment needed;
  - distance from the users;
  - the age of the pipe lines and treatment works;
  - maintenance practices;
  - and other factors—including accidents of history and geology.

# Affordability in Rural Water Systems

- According to Ohio EPA data (of combined water and sewer rates) affordability was an issue for **13% of the urban population**, but **33% of the rural population**.
- Rural areas do not have access to existing social service programs to assist those in the community who are unable to pay water rates.
- State programs to support low-income customers are disappearing.

# Example: Richfield Burrough, PA



# Richfield, PA

- Community of 220 on the border of Juniata and Snyder Counties, PA.
- Closure of a Mill and Garment Factory in the last 5-years have simultaneously impacted potential water system revenue and the employment base.
- In addition, necessary water system upgrades have made it necessary to boost water rates to cover cost.
- Cost for water and sewer is now \$540 per year and increasing—for a community where there are HH with income of \$6,500-\$8,000 per year.

# Issues for Richfield and Implications

- The Richfield water system had to raise revenue to support necessary upgrades in treatment and delivery of water.
- Raising water rates (the most obvious way to raise revenue) is problematic because of the income levels of many older residents on a fixed income.
- The PA state program to assist low-income rural water customers (PA has been cut due to budgetary concerns).

# Conclusions

- Richfield is not an anomaly. Currently in the RCAP list of projects, there are numerous examples of communities where costs are equally as burdensome or higher.
- We need to consider options that will buffer costs for the disadvantaged in society. Options that should be considered are as follow:
  - low-income water assistance grants through programs such as LIWAP;
  - Local options—lifeline and aggressive conservation rates for water and sewer;
  - Consideration of more appropriate technology for small communities—including options that substitute civic infrastructure for physical infrastructure.